

Public-Private Executive Leadership Summit on Bio-based Industry in Wisconsin

Governor's Conference Room
Madison, Wisconsin
Thursday June 23, 2005

All present introduced themselves and briefly described the reasons behind their attending the Summit.

Formal Remarks

Governor Jim Doyle welcomed the attendees, explained why Wisconsin is positioned to be a leader in the bio-based economy, outlined a number of the substantive measures his Administration has taken in a bipartisan manner to benefit the emerging bio-economy and stated that he wanted to work with all the stakeholders to move forward.

State Representative Don Friske, Chairman – Forestry Committee, Wisconsin State Assembly, described the bi-partisan support in the legislature for moving bio-based industries forward, his request that the state institutional support for agriculture (DATCAP) be balanced with similar institutional structures for the forest products sector and outlined his personal commitment to the sector.

Doug Kaempf, Program Manager of the Office of the Biomass Program within the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, gave an overview of DOE's programs and priorities. Earmarks are consuming an ever-increasing portion of his Office's budget. In FY 2007, he expects their office will issue an RFP for up to \$20 million in funding for each of 3 years to pay a portion of the costs for the creation of the first integrated bio-refinery. Key selection criteria will be degree of match, return on investment expected from the technology and the amount of displaced oil that the technology would provide if widely commercialized. He specifically mentioned that the Wisconsin Department of Commerce commitment of \$300,000 as match for the value-prior-to-pulping proposal to DOE was an example of strong local support and cost-sharing.

Ted Wegner, Assistant Director of the USDA Forest Service, Forest Products Laboratory, delivered remarks prepared by Mark E. Rey, USDA Under Secretary for Natural Resources and Environment, and distributed at the meeting. Under Secretary Rey described current USDA biomass priorities including methane digesters, lowering ethanol production costs, production of ethanol from non-corn feedstock, bio-diesel and -oils, and use of crops such as poplar, willow, and switch grass for the production of energy, fuel and/or chemicals.

Judy Ziewacz, Deputy Secretary of Wisconsin's Department of Agriculture, Trade & Consumer Protection (DATCP), described the extensive agricultural sector in

Wisconsin. She described the study being conducted for DATCP, DNR and DOA by a team led by the Energy Center of Wisconsin, and including the Center for Technology Transfer, GDS Associates, the Center on Wisconsin Strategy, and Resource Strategies, to evaluate Wisconsin's competitive advantages in the emerging bio-based industry sector and to identify high priority products for development. One of the most likely inputs is manure but the widespread locations for its production will put the onus on practical solutions.

Allan Glinski, Vice President - Research, Stora Enso North America, described Stora Enso's commitment to finding new methods of efficiently making paper or new value-added products. He described how this can be a win for everybody concerned: employees, the State of Wisconsin, the nation's energy policy, the environment and Stora's shareholders. He described the current Value-Prior-to-Pulping (VPP) project where a number of paper companies, academic institutions, national energy labs, the Wisconsin Department of Commerce and CTT have submitted a proposal to US DOE. The concept of VPP is to make better use of the organic material in logs by extracting hemicelluloses from wood chips prior to pulping the chips in preparation for papermaking. The extracted material would then be used to produce products such as ethanol acetic acid and other value-added chemicals. The process might also reduce the energy required for the subsequent pulping process. The project proposes to be sure that i) ethanol can be produced economically and ii) that the pulp is still good enough for papermaking.

Mark Kowlzan, Senior Vice President – Containerboard, Packaging Corporation of America (PCA), confirmed that PCA is very interested in evaluating the prospects for bio-refinery to be integrated into a PCA pulp and paper facility. In his prepared remarks, he described PCA's current work to study the applicability of black liquor gasification (BLG) to PCA's Tomahawk facility. Black liquor is a byproduct of the chemical pulping process and a source of energy for the paper making industry. This chemical by-product is currently burned in recovery boilers to generate some of the energy required for paper making and recover chemicals needed for pulping. The new BLG technology recovers more of the energy contained in black liquor via the gasification process. The process would also enable the production of value-added products from the resulting gases. Such facilities are expensive, anywhere from \$20-80 million dollars and PCA will need assistance if it is to proceed.

Peter Dreyfuss, Director - US DOE Midwest Regional Office, described the need for the creation of a holistic approach that couples production with infrastructure and demand for the products. He pointed out, for example, that in terms of biomass fuels such as biodiesel and ethanol, the state needs to develop investment in infrastructure such as fueling stations and consumer awareness as well as focusing on the production of the biomass fuels. When Wisconsin brings consumer's interest together with a distribution system for these products, it will then realize the full economic benefit. He used Minnesota as an example of a state that has coupled these three components together effectively. He also reminded the participants that the environmental aspects meant that some improved air quality could permit the receipt of some tax benefits.

Lori A. Perine, Executive Director - Agenda 2020 Technology Alliance of the American Forest and Paper Association, said that the CEO's participating in Agenda 2020 had asked her to focus on two priorities: building partnerships with states and working on technology deployment. She also described how agriculture-based and forest-based feedstocks can be combined at processing time. In her view Wisconsin can be an ideal site for deployment because of its commitment, the presence of the Forest Products Lab and the extensive forest and ag sectors within the state. She added that the environment for innovation requires attention to tax policies, regulations and consumer awareness besides the usual ingredients.

Governor Doyle thanked all present for their involvement and asked to be briefed on the balance of the Summit's discussions.

Benjamin Thorp, moderator of the Summit, asked the participants to describe ways in which it might be best move bio-based industry forward.

Doug Kaempf said that a number of states were looking at instituting preferred procurement programs. Significant amounts of training are available to teach states how to run such programs. He also said that industry prefers mandated requirements rather than federal rules with sunset clauses as the former are more predictable and conducive to obtaining long-term financing. He suggested that Minnesota is a good state to look at regarding their program of establishing E85 refueling stations, producer incentives to smaller-sized producers, energy-related state vehicle fleet rules and fuel mixing requirements.

Sue Beitlich, President - Wisconsin Farmers Union and Member of Governor's Bio-Based Advisory Group, described a new bio-diesel plant in Minnesota fueled from animal fat from the Farmers Union Marketing and Processing Association's rendering plant with Minnesota railroads now running their locomotives on the bio-diesel fuel. She also mentioned plans for a large canola-based plant in North Dakota. She conveyed her plan to bring the Summit's message back to the members of the Farmer's Union.

Masood Akhtar, President - Center for Technology Transfer, described the joint USDOE, Agenda 2020, TAPPI (Technical Association of Pulp and Paper Industry), Focus on Energy and CTT initiative to sponsor energy fairs which run concurrently with larger industry meetings as a way of getting more people interested in new energy-efficiency technologies.

Preston Schutt, Director - Business Development at the Center for Technology Transfer, stated that there was a role and need for the Federal and Wisconsin governments to develop and set market standards for what constitutes bio-based products and energy.

Doug Kaempf said that USDA was starting to set standards and might introduce labeling rules.

Steve Tyron, Assistant Administrator- WI Division of Energy, described initiatives to cut energy use by the state government. He said that the Focus on Energy program was leading several efforts in that regard.

Mary Woolsey Schlaefer, Executive Assistant - Department of Natural Resources, felt that the key to success is to get things going on the ground in order to show how it works. She described the Doyle administration's Green Tier legislation which is a tool that can provide flexibility to organizations that commit to superior environmental performance. She commented that the Green Tier law is unique in that it allows the state to enter into charter agreements with multiple organizations and that this unique tool could be a key in providing flexibility to organizations instituting new technologies. She said that the DNR was in the midst of discussing the interrelationship of Green Tier with EPA regulations in hopes of obtaining some flexibility in the EPA rules.

Doug Kaempf said that Project XL was an EPA national pilot program to test innovative ways of achieving better and more cost-effective energy efficiency, public health and environmental protection, but that each EPA region had its own unique style in implementing such projects. He described a joint Midwest EPA-DOE meeting to be held in Chicago at the end of August.

Peter Dreyfuss described EPA Supplemental Environmental Projects whereby in lieu of paying fines, organizations provide funding for projects which will improve the environment such as alternate fuel school buses and wind farms.

Tim Laatsch, Senior VP – Communications at Stora Enso North America, asked what concrete things the Summit participants should try to do in order to convert the meeting's talk into action. [NOT SURE THIS IS THE CORRECT LOCATION; I AM CHECKING]

Benjamin Thorp suggested that an industry-based biorefinery was not quite the right concept. Rather the discussions seemed to suggest regionally based biorefineries with a radius of economical transformable materials. He then asked the participants to describe ways to remove roadblocks currently inhibiting forward progress.

Ted Wegner said that, when using public funds, it was important to demonstrate how the public interest was served by various bio-based industry projects. He also said that Intellectual Property issues need to be addressed in all projects using federal funds because the government wants to see technology applications replicated broadly throughout the U.S., not kept proprietary to one company using the technology.

Doug Kaempf said that Wisconsin needs to develop a prototype which includes an integrated approach to an ag- and forest-based bio-refinery. He asked to see a copy of Wisconsin's strategy for bio-based industry when it is ready. He will then see if there are ways to do a pilot project with US DOE and Wisconsin. Any such project will need

to be competitively bid. He reiterated the important of cost sharing – state involvement counts in bid evaluations. Any Wisconsin projects also need to show national benefits. Doug said that congressional earmarks are consuming more than 40% of his office's budget and restricting his ability to implement programs. However, his program does have some funds available for out-reach, education and perhaps a little R&D.

Peter Dreyfuss said that the Midwest is the best spot for a showcase since much of the nation's biomass is located here. He stated that Wisconsin could indeed serve as that showcase because of the unique public-private partnerships that are already well developed. He believed that a regional effort could yield even more worthwhile results.

Masood Akhtar reminded participants that Wisconsin Act 255, implemented by the WI Department of Commerce, provides up to \$250,000 in matching funds for use in applying for Federal grants. These funds can be accessed by farmers and other small businesses.

Pat Meier, Director, Biobased Industry Initiative, said that one way to build momentum is via the roadmap to be issued in May 2006 by the Governor's new Consortium on Biobased Industry.

Lori Perine said that Wisconsin will not get Federal help if US DOE's budgets keep getting cut or earmarked. She said that Wisconsin's Congressional delegation could help by voting to ensure full funding for DOE's programs. She committed Agenda 2020 to working with Wisconsin to bring Wisconsin's messages to Congress and to help keep Wisconsin aware of federal opportunities.

Ted Wegner said the best thing to do next is to propose some specific projects utilizing sustainable biomass feedstock available in Wisconsin.

Paul DeLong, Administrator - Forestry Division, Department of Natural Resources and Chief State Forester, asked what the best time to interface with US DOE would be in light of federal grant processes and cycles.

Doug Kaempf said that his office is currently working on the FY 2007 budget but that every year they also have a small amount of money set aside for special projects. He said timing is less important than having a clear vision of the goals to be achieved and measurable results.

Brad Pfaff, from the Office of Representative Ron Kind, said that it's a little late to affect the 2005 Energy bill. He said that in the Summer of 2006 work would commence on the comprehensive Farm bill and that might place to look at enacting legislative changes and funding new programs. He also recommended that all concerned think about how to engage the Department of Interior in bio-based initiatives.

Preston Schutt proposed that, as a next step, a video-conference or meeting be scheduled in 6 months for the Summit participants to update each other on progress of

State and Federal activities and to follow up on Action Items developed during the Summit. [NOT SURE THIS IS THE CORRECT LOCATION; I AM CHECKING]

Peter Dreyfuss said that the National Conference of State Legislatures has funded some policy work on energy legislative issues.

Judy Ziewacz said that the State of Wisconsin will have to work out public policy issues regarding state support of the agricultural and forest sectors, especially with regard to ethanol production.

Benjamin Thorp thanked everybody for their participation and ended the Summit.

Summary of Next Steps Mentioned During Summit
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1. ECW/CTT complete the Competitive Scan being conducted for DATCP
2. Roadmap to be issued in May 2006 by the Governor's new Consortium on Biobased Industry
3. CTT to continue working with PCA and Stora-Enso on forest biorefinery issues and CTT to work with developers of similar technologies in the ag-sector
4. Scan and Roadmap to be provided to Doug Kaempf in order to identify areas of possible cooperation
5. Teleconference in January 2006 to review progress
6. Eric Postel, Director – Venture Investments CTT, to prepare this meeting summary